

Mapped, edited, and published by the Geological Survey
in cooperation with Virginia Division of Mineral Resources
Control by USGS and USGS/GS
Topography by photogrammetric methods from aerial photographs
taken 1966 and 1967. Field checked 1969
Polyconic projection. 1927 North American datum
10,000-foot grids based on West Virginia coordinate system; south zone
and Virginia coordinate system; north zone
zone 17, shown in blue

SCALE 1:24,000
CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION
Primary highway, all weather. Light-duty road, all weather.
Secondary highway, all weather. Improved surface.
Unimproved road, fair or dry weather.
U.S. Route

FORT SEYBERT, W. VA.-VA.
NW 1/4 FORT SEYBERT 15 QUADRANGLE
N 38° 37' 30" W 79° 07' 30"

1969

Landslides and related features interpreted
from aerial photographs:

1:60,000 (black and white) 1959, 1979
1:79,000 (black and white) 1977

Photointerpretation and field check 1979
This map has not been edited or reviewed
for conformity with Geological Survey
standards and nomenclature.

LANDSLIDES AND RELATED FEATURES

OF THE FORT SEYBERT, W. VA.-VA. QUADRANGLE

by
Roger E. Thomas and Robert J. Hackman
1980

U.S. Geological Survey

OPEN FILE MAP 80-194 (F-7)

NOTE

Information shown is intended as a
general guide to ground conditions as of
the date of field check. Additional
landslides and rockfalls should be anticipated
in all map units. The map unit depicts
the dominant condition in the area delineated
and variations in slope stability may occur
at any point in the unit. This map is suit-
able for general planning purposes and as a
supplement to more detailed studies for site
selection. The map cannot be used as a sub-
stitute for detailed geologic and engineering
investigations to establish design and
construction criteria of specific sites.
Some symbols may not appear on this map
because the description is applicable to a
series of maps.

MAN-MADE FEATURES

Strip mines (combination of letter symbols
indicates complex formed of more than one
type of strip mine)

sh bench with high wall
sf furrowed with high wall
sd multiple furrows and multiple benches
ss hilltop removed
srg reclaimed by grading
sru reclaimed by secondary use
sh/r regraded in part, high wall
remains

Coal refuse banks
r identified on aerial photographs;
not classified in field check

rb not burnt nor on fire

rbb burnt

rbd burning

rbs sludge

Quarries

q quarry site

qub spoil bank, quarry waste

Gravel pits

g site of gravel pit

Slides in man-made features

af earth flow in fill

a/s earth flow in strip castings

a/r earth flow in coal refuse

Charlotteville 1" by 2" sheet

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 18 19 20 21 22 23 24 25 26 27 28 29 30

31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

61 62 63 64 65 66 67 68 69 70 71 72 73 74 75

76 77 78 79 80 81 82 83 84 85 86 87 88 89 90

91 92 93 94 95 96 97 98 99 100 101 102 103 104 105

106 107 108 109 110 111 112 113 114 115 116 117 118 119 120

121 122 123 124 125 126 127 128 129 130 131 132 133 134 135

136 137 138 139 140 141 142 143 144 145 146 147 148 149 150

151 152 153 154 155 156 157 158 159 160 161 162 163 164 165

166 167 168 169 170 171 172 173 174 175 176 177 178 179 180

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196 197 198 199 200 201 202 203 204 205 206 207 208 209 210

211 212 213 214 215 216 217 218 219 220 221 222 223 224 225

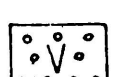
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241 242 243 244 245 246 247 248 249 250 251 252 253 254 255

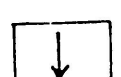
256 257 258 259 260 261 262 263 264 265 266 267 268 269 270

271 272 273 274 275 276 277 278 279 280 281 282 283 284 285

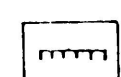
286 287 288 289 290 291 292 293 294 295 296 297 298 299 300



COLLUVIAL SLOPES WITH LANDSLIDES
Landslides too small or obscure to map
individually.



AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS
AVALANCHES
Primarily shallow, narrow ravines and chutes with
accumulation of stony colluvium generally 10 ft.
(3 m) or less in thickness; susceptible to rapid
movement during intense rainfall. Most ravines
and chutes designated show evidence of former
debris flows and avalanches. Symbol & design-
ates historical debris flow or debris avalanche.



AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made
slopes and cliffs, 15 ft. (4.5 m) or more high;
formed dominantly of sandstone, limestone, sandy
shale, mudstone and claystone. Interbedded mud-
stone, claystone and shale weather rapidly leaving
sandstone and limestone rock faces unsupported.



SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in land-
slides elsewhere in map area; primarily areas
underlain by claystone, mudstone and shale
associated with other rock types. Rock weathers
rapidly on exposure forming clayey soil highly
susceptible to sliding. Includes covers (U-shaped,
shallow valleys) containing thick layers of clayey
soil that are very susceptible to sliding where
excavation breaks continuity of slope and where
overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES

Map areas in which no patterns or symbols are shown;
primarily valley floors, ridge tops and broad
benches; modification by excavation and fill may
lead to local landslides.

The first five digits of the open file number designate the
specific 1:250,000 scale map sheet of which this quadrangle
is a part. The last two digits designate the position of the
quadrangle in a subdivision of the 1:250,000 scale map sheet
on rows and tiers shown in the diagram to the right. The
location of this quadrangle is shown by the black square.

